

**FIG. 1**

<u>HTML + D Attributes</u>	<u>Description</u>
<FORM ACTION = "url"	To/From Web Server URL
FROM "file name"	From Terminal Local File
TO PRINTER	To Local Printer
TO "file name"	To Terminal Local File
FROM SCR	From Smart Card Reader
TO SCR	To Smart Card Reader
METHOD = "GET"	Retrieve Data
"POST"	Store Data
"PAYMENT"	Directive to deliver INPUT data to a private Payment Network for authorization and settlement.
SQL <database name>	SQL statement database table

<u>Attribute</u>	<u>Value</u>	<u>Description</u>
<INPUT TYPE =	"text"	
	"password"	
	"checkbox"	
	"radio"	
	"submit"	
	"reset"	
NAME =	<field name>	
VALUE =	<initial value>	
CHECKED =		
SIZE =		
MAXLENGTH =		
>		

<u>Attribute</u>	<u>HTML + D Value</u>	<u>Terminal Device</u>
TYPE =	"MSRT1"	Mag Stripe Reader - Track 1
	"MSRT2"	Mag Stripe Reader - Track 2
	"KEY"	Terminal Command Keypad
	"PIN"	PIN Pad
	"BCW"	Bar Code Wand
	"MICR"	Check MICR Reader
	"AMT"	Dollar amount key input mask
	"INT"	Integer key input mask
	"LOCAL"	Input from Local Variable
	"AUTOSUBMIT"	Submit FORM to ACTION URL
NAME =	ip_address	Local Variable - Terminal's IP Address
	host_phone	Local Variable - Local Internet Access Phone Number
	tid	Local Variable - Terminal ID
	work_key	Local Variable - PIN encryption working key
	datetime	Local Variable - Date and time
	deposit_acct	Local Variable - Merchant Deposit Account

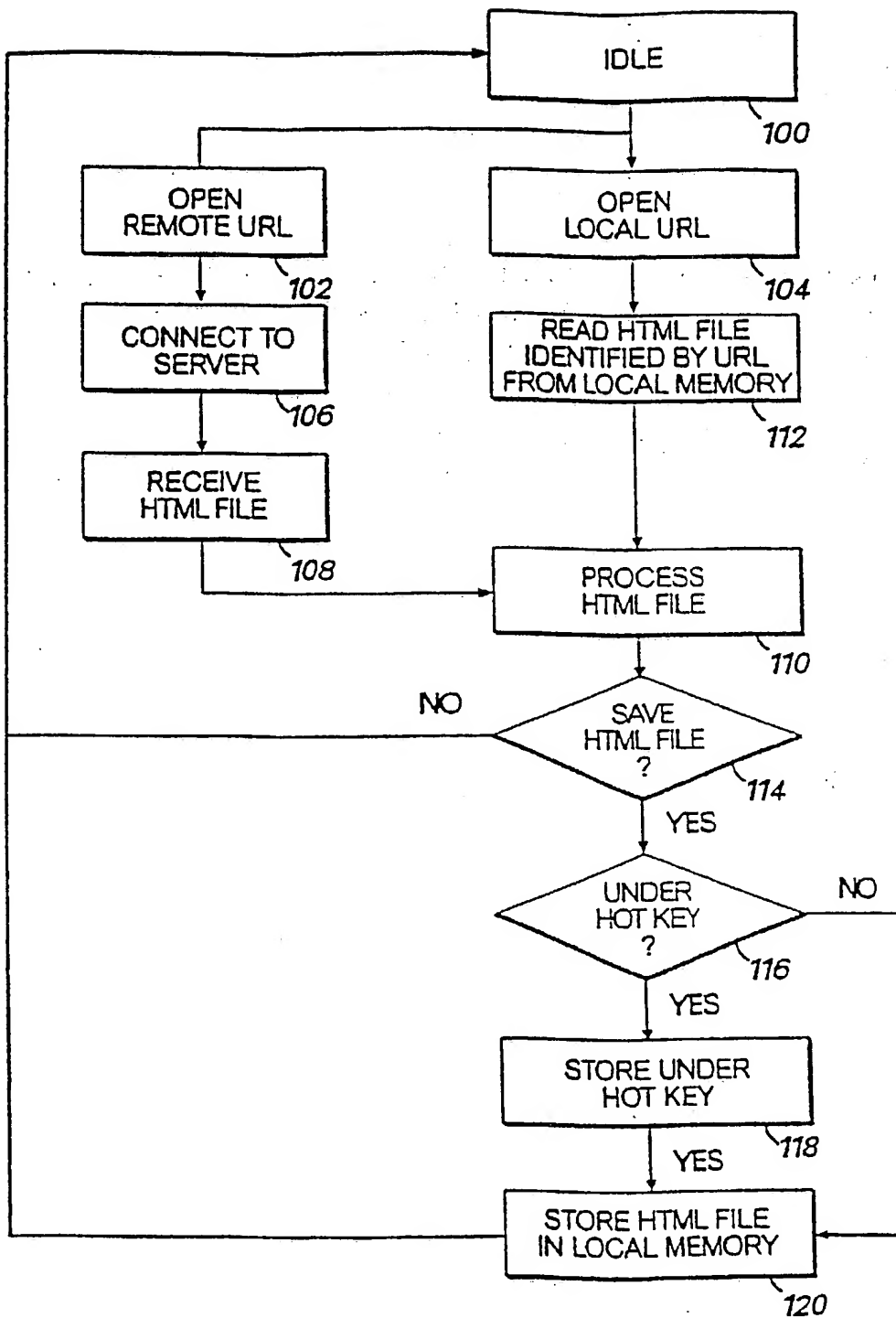
**FIG.2**

## SQL Statements

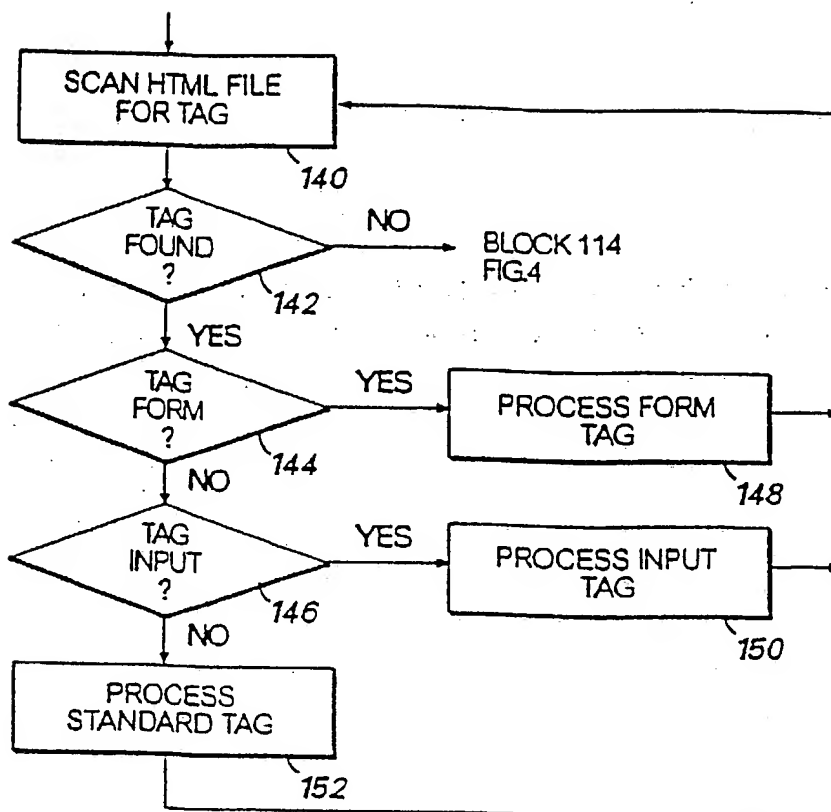
The following SQL commands represent a subset of the entire command set that varies by database vendor.

<u>HTML+D Attributes</u>	<u>Description</u>
<i>SELECT</i> *, field_name, ~ <i>FROM</i> =<table name> ~ <i>WHERE</i> =<condition> name = "constant" name <i>LIKE</i> "constant" name <i>IN</i> "constant" <i>AND</i> <i>OR</i> <i>ORDER</i> = <i>ASC</i> <i>DESC</i> 2 <i>GROUP</i> =<name>	Request field_name (one or many) from a database table Database table name Conditional selection of data        Request in ascending order ..descending ..by 2's
<i>INSERT</i> <i>TABLE</i> =<table name> <i>VALUES</i> = "constants"	Insert new data in database table
<i>UPDATE</i> <i>FROM</i> <table name> <i>SET</i> = field_name = "constant" [ <i>WHERE</i> =<condition> ]	Update field_name in database table Update if <i>WHERE</i> clause is satisfied
<i>DELETE</i> <i>FROM</i> <table name> [ <i>WHERE</i> =<condition> ]	Delete all columns that satisfy <i>WHERE</i> clause
<i>CREATE</i> <i>TABLE</i> <table_name> <i>PRIMARY KEY</i> <name>	Create database table

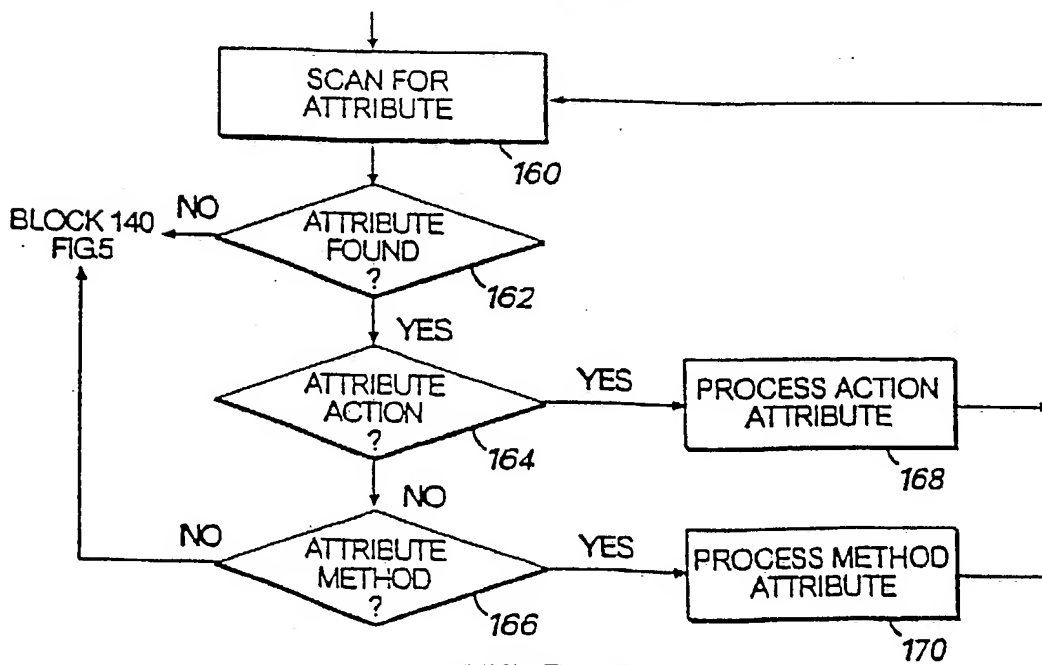
**FIG.3**



**FIG.4**

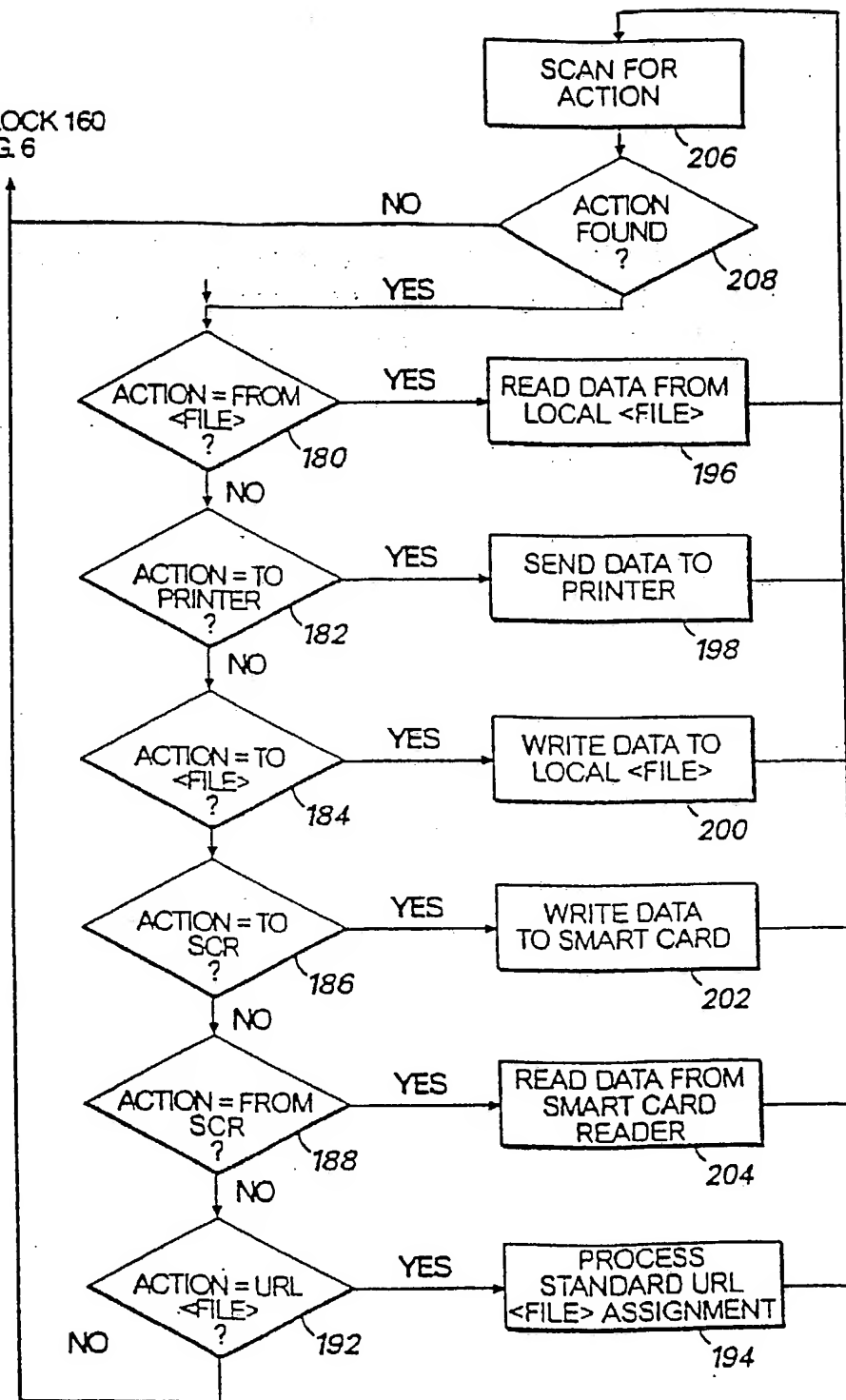


**FIG. 5**

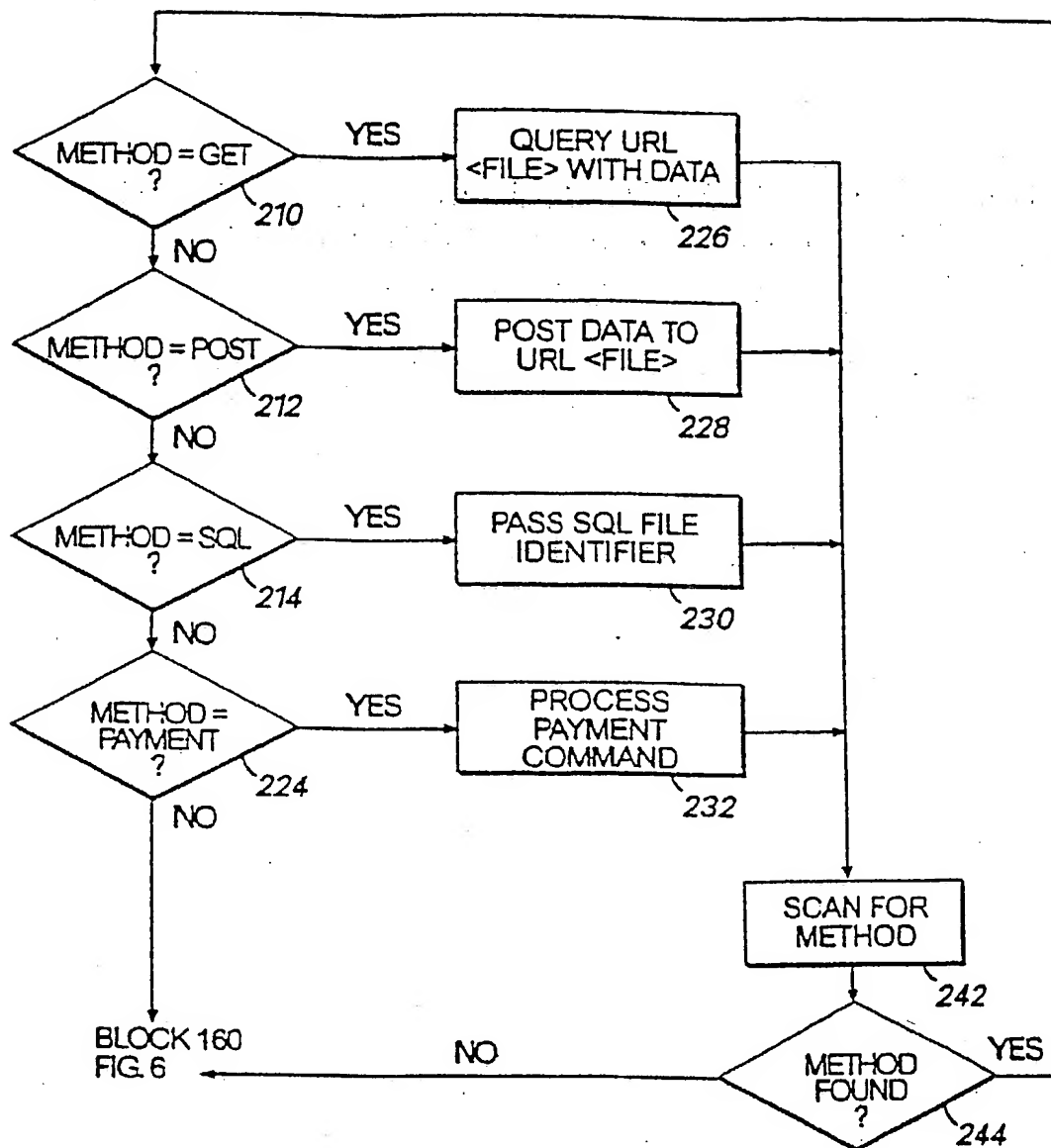


**FIG. 6**

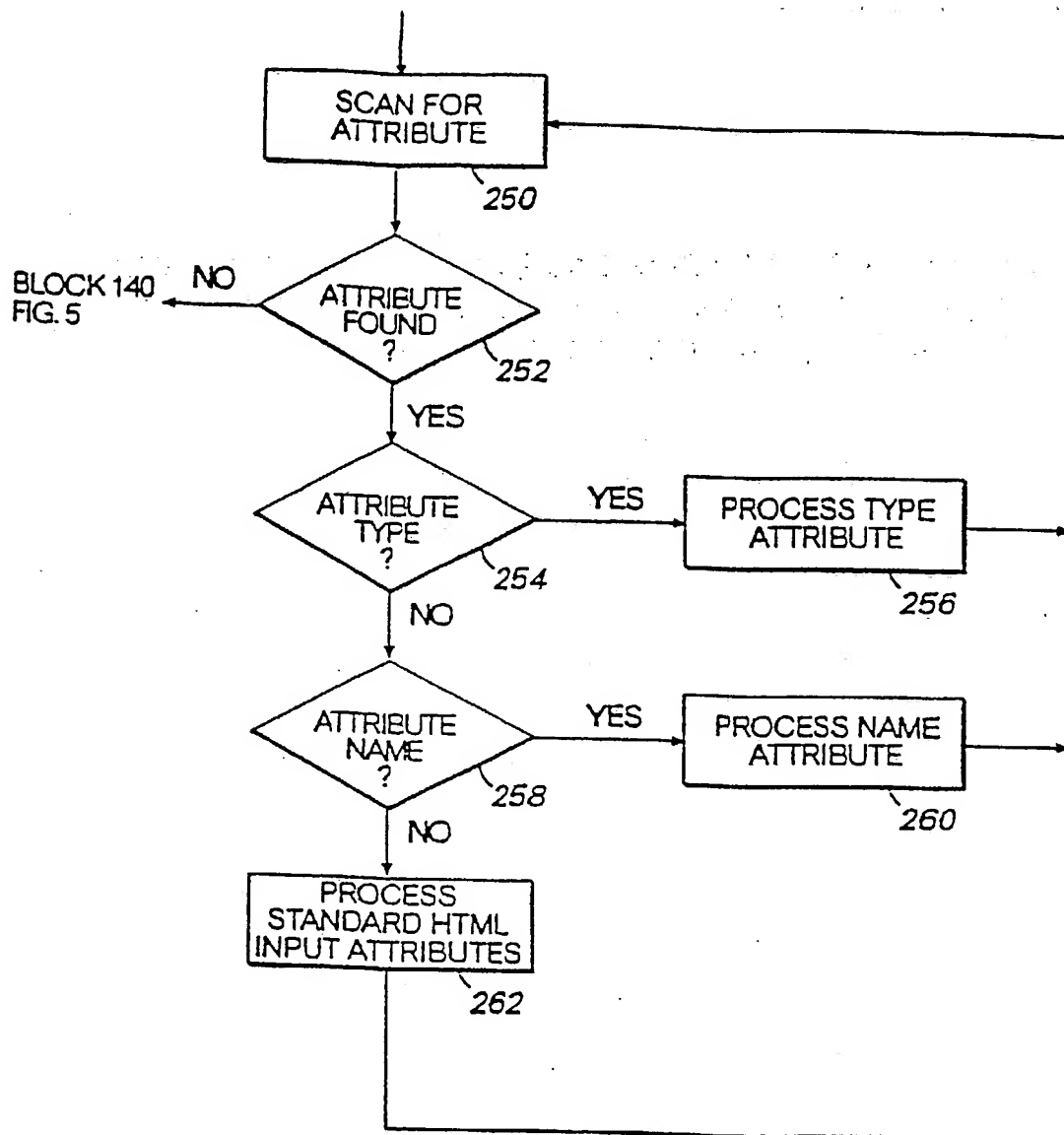
BLOCK 160  
FIG. 6



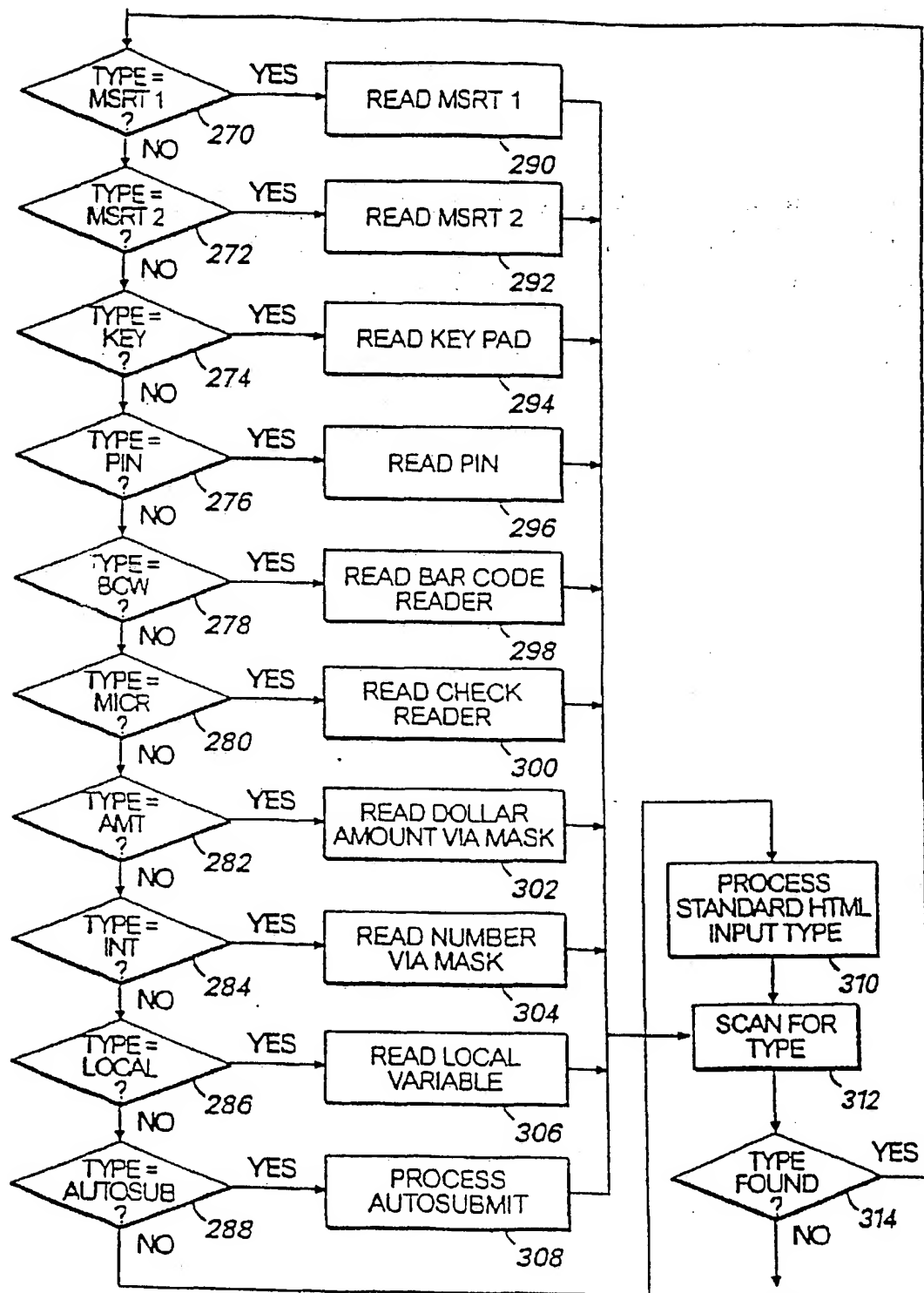
**FIG. 7**



**FIG. 8**

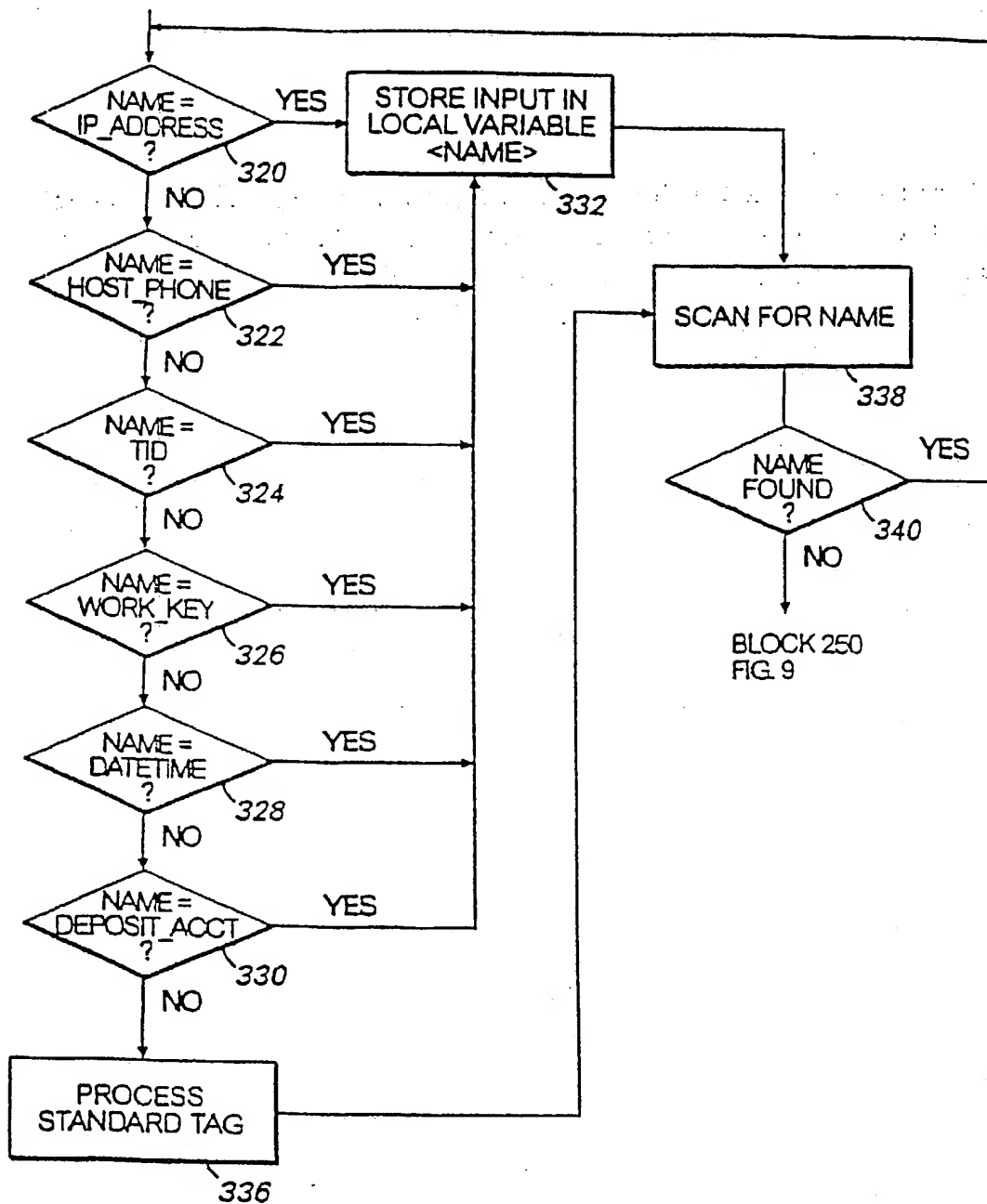


**FIG. 9**



**FIG.10**

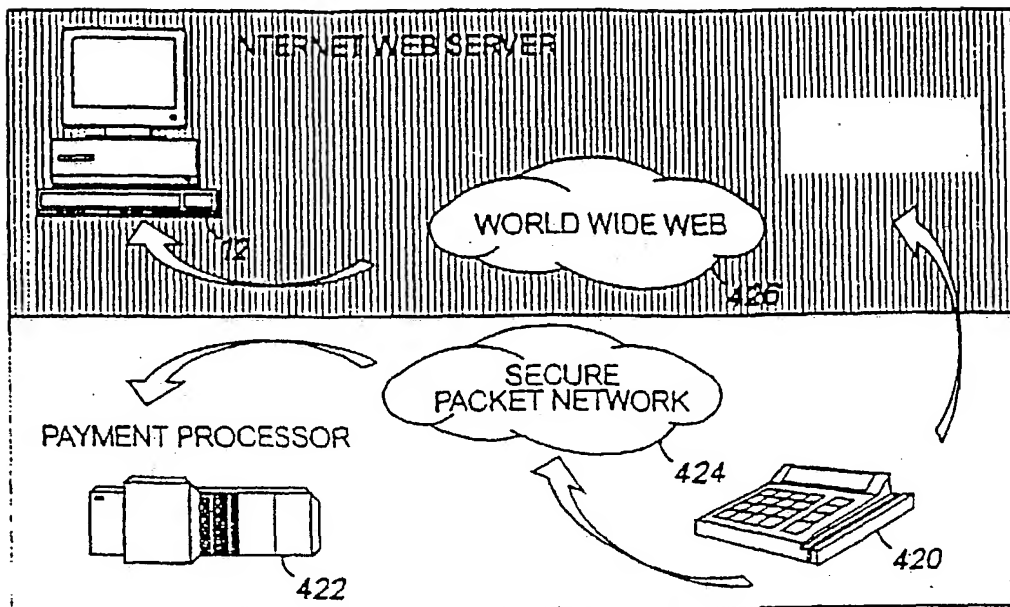
BLOCK 250  
FIG. 9



**FIG.11**

1. <FORM ACTION=URL METHOD= GET>
2. <FORM ACTION=URL METHOD= POST>
3. <FORM ACTION=URL METHOD= SQL <database\_name>

**FIG.12**



**FIG.13A**

```
<FORM ACTION=<filename> METHOD=PAYMENT>
<INPUT TYPE=AUTOSUBMIT>
</FORM>
```

**FIG.13B**

```
<FORM ACTION=dsinet METHOD=PAYMENT>
<INPUT TYPE=LOCAL NAME=DEPOSIT_ACCT VALUE=123456890234567890>
<INPUT TYPE=AUTOSUBMIT>
</FORM>
```

**FIG.13C**

### 1.a. Transaction Request HTML+D

```

<HTML>
<BODY>
<FORM ACTION=dbase_URL
  METHOD=SQL
  "BEGIN TRAN
    IF NOT EXISTS ( SELECT substring(account, 1, 20) FROM auth_table)
      BEGIN
        INSERT TABLE=log_table VALUES=(getdate(),tid, substring (account, 1,20) ,
        substring( account 22, 4), amount)
        SELECT * FROM log_table WHERE transdate = getdate()
      END
    ELSE SELECT * FROM error_table WHERE error_no=1
  COMMIT TRAN">
<INPUT TYPE="LOCAL" NAME=tid>
ENTER ACCOUNT NUMBER:
<INPUT TYPE="MSRT2" SIZE=40 NAME=account>
ENTER AMOUNT
<INPUT TYPE="AMT" SIZE=8 NAME=amount>
<INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>

```

### 1.b. Transaction Accepted Response

```

<HTML>
<BODY>
<FORM ACTION=TO PRINTER METHOD=POST>
JUNE 1 1995      10:30AM      PURCHASE</P>
TERMINAL ID:      9999999999</P>
ACCOUNT NUMBER    99999999999999999999</P>
EXP DATE:        99/99</P>
AMOUNT            $9999.99</P>
AUTH NUMBER      9999999999</P>
</p>
-----</p>
      CUSTOMER SIGNATURE </p>
</FORM>
APPROVED:9999999999</P>
</BODY>
</HTML>

```

### 1.c. Transaction Declined or Submit Error Response

```

<HTML>
<BODY>
DECLINED<MESSAGE>
</BODY>
</HTML>

```

**FIG.14**

## 2.a. Transaction Request HTML+D

```

<HTML>
<BODY>
<FORM ACTION=dbase URL
METHOD=SQL*BEGIN TRAN
  IF NOT EXISTS ( SELECT substring(account, 1, 20) FROM auth_table)
  BEGIN
    INSERT TABLE=log_table VALUES=(getdate(),tid, substring( account, 1,20),
    substring( account, 22, 4), amount)
  END
  ELSE BEGIN
    SELECT * FROM error_table WHERE error_no=1
    RETURN
  END
  INSERT TABLE=order_table VALUES=( getdate(), cust_name,address,city, state, zip,
  part_code, unit_price, tax, ship_method, ship_chrg, unit_price + tax +
  ship_chrg, substring( account, 1, 20), substring( account, 22, 4))
  SELECT * FROM order_table WHERE trandate = getdate()
  COMMIT TRAN">
CUSTOMER NAME:
<INPUT TYPE="TEXT" SIZE=30 NAME=cust_name></p>
ADDRESS:
<INPUT TYPE="TEXT" SIZE=40 NAME=address></p>
CITY:
<INPUT TYPE="TEXT" SIZE=20 NAME=city></p>
STATE:
<INPUT TYPE="TEXT" SIZE=2 NAME=state>
ZIP:
<INPUT TYPE="TEXT" SIZE=10 NAME=address></p>
SCAN PART CODE:
<INPUT TYPE="BCW" SIZE=9 NAME=part_code></p>
ENTER UNIT PRICE:
<INPUT TYPE="AMT" SIZE=8 NAME=unit_price></p>
TAX:
<INPUT TYPE="AMT" SIZE=5 NAME=tax></p>
SHIPPING METHOD:
<INPUT TYPE="TEXT" SIZE=10 NAME=ship_method></p>
SHIPPING AMOUNT:
<INPUT TYPE="AMT" SIZE=5 NAME=ship_chrg></p>
SLIDE CARD:
<INPUT TYPE="MSRTZ" SIZE=40 NAME=account></p>
<INPUT TYPE="SUBMIT">
</FORM>
</BODY>
</HTML>

```

**FIG.15A**

2.b. Transaction Accepted Response

555

```
<HTML>
<BODY>
<FORM ACTION=TO PRINTER METHOD=POST>
ORDER # 9999999999 APPROVED</p>
JUNE 1 1995      10:30AM      PURCHASE</P>
TERMINAL ID:      999999999</P>
NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</p>
ADDRESS:</p>
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</p>
CITY:XXXXXXXXXXXXXXXXXXXXXXXXXXXXX</p>
STATE:XX          ZIP:XXXXXXXXXXXXX</p>
ACCOUNT NUMBER:  99999999999999999999</p>
EXP DATE:                               99/99</p>
PART CODE:                               999999999</p>
UNIT PRICE:                               $9999.99</p>
SHIP METHOD:XXXXXXX CHARGE                $9999.99</p>
TOTAL AMOUNT:                               $9999.99</p>
AUTH NUMBER:                               999999999</p>
</p>

-----</p>
CUSTOMER SIGNATURE</p>

</FORM>
</BODY>
</HTML>
```

2.c. Transaction Declined or Submit Error Response

560

```
<HTML>
<BODY>
DECLINED <error code>
</BODY>
</HTML>
```

FIG.15B

### 3.a. Transaction Request HTML+D

```
<HTML>
<BODY>
<FORM ACTION=dbase_URL
METHOD SQL
  "INSERT TABLE=order_table VALUES=( getdate(), cust_name,address,city, state, zip,
    part_code, unit_price, tax, ship_method, ship_chrg,unit_price + tax +
    ship_chrg, substring( account, 1, 20) ,substring( account, 22, 4))
  SELECT * FROM order_table WHERE transdate = getdate()">
<INPUT TYPE="LOCAL" NAME=tid>
CUSTOMER NAME:
<INPUT TYPE="TEXT" SIZE=30 NAME=cust_name></p>
ADDRESS:
<INPUT TYPE="TEXT" SIZE=40 NAME=address></p>
CITY:
<INPUT TYPE="TEXT" SIZE=20 NAME=city></p>
STATE:
<INPUT TYPE="TEXT" SIZE=2 NAME=state>
ZIP:
<INPUT TYPE="TEXT" SIZE=10 NAME=address></p>
ENTER PART CODE:
<INPUT TYPE="TEXT" SIZE=10 NAME=part_code></p>
ENTER UNIT PRICE:
<INPUT TYPE="AMT" SIZE=8 NAME=unit_price></p>
TAX:
<INPUT TYPE="AMT" SIZE=5 NAME=tax></p>
SHIPPING METHOD:
<INPUT TYPE="TEXT" SIZE=10 NAME=ship_method></p>
SHIPPING AMOUNT:
<INPUT TYPE="AMT" SIZE=5 NAME=ship_chrg></p>
<INPUT TYPE="SUBMIT" >
</FORM>
</BODY>
</HTML>
```

**FIG.16A**

### 3.b. Transaction Accepted Response

```
<HTML>
<BODY>
<FORM ACTION=TO PRINTER METHOD=POST>
ORDER # 9999999999 APPROVED</p>
JUNE 1 1995      10:30AM      PURCHASE</P>
TERMINAL ID:          999999999</P>
NAME: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</p>
ADDRESS:</p>
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</p>
CITY: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</p>
STATE: XX          ZIP:XXXXXXXXXX</p>
PART CODE:          999999999</p>
UNIT PRICE:          $9999.99</p>
SHIP METHOD:XXXXXXX CHARGE:      $9999.99</p>
TOTAL AMOUNT:          $9999.99</p>
</FORM>
<FORM ACTION=<file_name> METHOD=PAYMENT>
<INPUT TYPE=AUTOSUBMIT>
</FORM>
</BODY>
</HTML>
```

### 3.c. Transaction Declined or Submit Error Response

```
<HTML>
<BODY>
DECLINED <error code>
</BODY>
</HTML>
```

**FIG.16B**

#### 4.a. Transaction Request HTML+D

```
<HTML>
<BODY>
<FORM ACTION=SCR1 METHOD=POST>
<INPUT TYPE="LOCAL" NAME=id>
SLIDE CARD:
<INPUT TYPE="MSRT2" SIZE=40 NAME=track2>
ENTER AMOUNT:
<INPUT TYPE="AMT" SIZE=8 NAME=amount>
<INPUT TYPE="LOCAL" NAME=work_key>
<INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>
```

#### 4.b. Transaction Accepted HTML+D

```
<HTML>
<BODY>
<FORM ACTION=TO PRINTER METHOD=POST>
DATE:99/99/99 TIME:9999A</P>
ACCOUNT NUMBER 99999999999999999999</p>
EXP DATE: 99/99</p>
AMOUNT: $9999.99</p>
AUTH NUMBER 9999999999</p>
</FORM>
APPROVED:9999999999</P>
</BODY>
</HTML>
```

#### 4.c. Transaction Declined or Submit Error Response

```
<HTML>
<BODY>
DECLINED <error code>
</BODY>
</HTML>
```

**FIG.17A**

22

**FIG. 17B**

### 6.a Transaction Request HTML+D

```
<HTML>
<BODY>
<FORM ACTION=host_URL METHOD=POST>
<INPUT TYPE="LOCAL" NAME=id>
SLIDE CARD
<INPUT TYPE="MSRT2" SIZE=40 NAME=track2>
<INPUT TYPE="PIN" SIZE=4 NAME=pin>
ENTER AMOUNT:
<INPUT TYPE="AMT" SIZE=8 NAME=amount>
<INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>
```

## 6.b. Transaction Accepted HTML+D

```
<HTML>
<BODY>
<FORM ACTION=TO PRINTER METHOD=POST>
DATE:99/99/99                                TIME:9999A</P>
TERMINAL ID:                                9999999999</P>
ACCOUNT NUMBER    999999999999999999999999</P>
EXP DATE:                                                99/99</P>
AMOUNT                                                $9999.99</P>
AUTH NUMBER                                9999999999</P>
</FORM>
APPROVED:9999999999</P>
</BODY>
</HTML>
```

### 6.c. Transaction Declined or Submit Error Response

```
<HTML>
<BODY>
DECLINED <error code>
<INPUT TYPE="LOCAL" NAME=work_key VALUE="9999999999999999">
</BODY>
</HTML>
```

FIG. 18

### 7.a. Transaction Request HTML+D

```
<HTML>
<BODY>
<FORM ACTION=dbase_URL
      METHOD=SQL
      "IF EXISTS ( SELECT account FROM check_table)
        SELECT * FROM check_table WHERE account = DDAaccount
        ELSE SELECT * FROM error_table WHERE error_no=1">
<INPUT TYPE="LOCAL" NAME=id>
SCAN CHECK:
<INPUT TYPE="MICR" SIZE=20 NAME=account>
ENTER AMOUNT
<INPUT TYPE="AMT" SIZE=8 NAME=amount>
<INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>
```

## 7.b Transaction Accepted Response

[illegible]

### 7.c. Transaction Declined or Submit Error Response

```
<HTML>
<BODY>
DECLINED <error code>
</BODY>
</HTML>
```

FIG. 19

### 8.a. Transaction Request HTML+D

```
<HTML>
<BODY>
<FORM ACTION=base_URL
      METHOD=SQL
      * BEGIN TRAN
      IF NOT EXISTS ( SELECT substring(account,51,20) FROM auth_table)
      BEGIN
      SELECT cur_bal FROM cust_tbl WHERE substring(account,51,20)=account
      SELECT amount=amount-(points/.01)
      SELECT cur_bal=cur_bal+(amount*.01)
      UPDATE TABLE=cust_tbl VALUES=(getdate(), account, cur_bal-points)
      SELECT * FROM log_table WHERE transdate=getdate()
      INSERT TABLE=log_table VALUES=(getdate(), tid, substring(account,51,20),
      substring( account, 72, 4), amount)
      END
      ELSE SELECT * FROM error_table WHERE error_no=1"
      COMMIT TRAN">
<INPUT TYPE="LOCAL" NAME=tid>
ENTER ACCOUNT NUMBER:
<INPUT TYPE="MSRT1" SIZE=90 NAME=account>
ENTER AMOUNT
<INPUT TYPE="AMT" SIZE=8 NAME=amount>
REDEEM POINTS?
<INPUT TYPE="INT" SIZE=6 NAME=points>
<INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>
```

### 8.b. Transaction Accepted Response

[illegible]

### 8.c. Transaction Declined or Submit Error Response

```
<HTML>
<BODY>
DECLINED <MESSAGE>
</BODY>
</HTML>
```

FIG. 20

### 9.a. Transaction Request HTML+D

```

<HTML>
<BODY>
<FORM ACTION=dbase_URL
      METHOD=SQL
      "SELECT fields FROM table WHERE condition">
<INPUT TYPE="LOCAL" NAME=id>
ENTER SEARCH TABLE NAME:
<INPUT TYPE="TEXT" SIZE=10 NAME=table>
ENTER SEARCH FIELD NAMES:
<INPUT TYPE="TEXT" SIZE=100 NAME=fields>
ENTER SEARCH CONDITION:
<INPUT TYPE="TEXT" SIZE=50 NAME=condition>
<INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>

```

### 9.b. Transaction Response

```

<HTML>
<BODY>
<FORM ACTION=TO PRINTER METHOD=POST>
FIELD1  FIELD2  FIELD3  -----  FIELDN  </p>
-----  -----  -----  -----  -----  </p>
XXXXX   XXXXX   XXXXX               XXXXX   </p>
XXXXX   XXXXX   XXXXX               XXXXX   </p>
.
.
XXXXX   XXXXX   XXXXX               XXXXX   </p>
</FORM>
</BODY>
</HTML>

```

**FIG.21**

## 10.a Transaction Request HTML+D

```
<HTML>
<BODY>
<FORM ACTION=dbase_URL
  METHOD=SQL
  * INSERT TABLE=log_table VALUES=( getdate(), tid, gross_sales, opn_chks, voids,
  emp_disc, mgr_disc, vip_card, man_over, coupons, sales_tax, c_dep1, c_dep2,
  c_dep3, c_dep4, chg_fund, cc_dep, batch_no, chrg_sales, paid_outs, co_sales,
  cc_sales, te_sales, gross_sales - opn_chks - voids - emp_disc - mgr_disc - vip_card -
  man_over - coupons - sales_tax, gross_sales - opn_chks - voids -
  emp_disc - mgr_disc - vip_card - man_over - coupons - c_dep1 - c_dep2 -
  c_dep3 - c_dep4 - chg_fund - cc_dep - batch_no - chrg_sales - paid_outs)
  SELECT * FROM log_table WHERE trandate = getdate() ">
<INPUT TYPE="LOCAL" NAME=tid>
ENTER GROSS SALES:
<INPUT TYPE="AMT" SIZE=8 NAME=gross_sales>
ENTER OPEN CHECKS:
<INPUT TYPE="INT" SIZE=7 NAME=opn_chks>
ENTER VOIDS:
<INPUT TYPE="INT" SIZE=7 NAME=voids>
ENTER EMP DISCOUNTS:
<INPUT TYPE="INT" SIZE=7 NAME=emp_disc>
ENTER MGR DISCOUNT:
<INPUT TYPE="INT" SIZE=7 NAME=mgr_disc>
ENTER VIP CARD:
<INPUT TYPE="INT" SIZE=7 NAME=vip_card>
ENTER MANUAL OVERRINGS:
<INPUT TYPE="INT" SIZE=7 NAME=man_over>
ENTER COUPONS:
<INPUT TYPE="INT" SIZE=7 NAME=coupons>
ENTER SALES TAX:
<INPUT TYPE="AMT" SIZE=8 NAME=sales_tax>
ENTER CASH DEPOSIT 1:
<INPUT TYPE="AMT" SIZE=8 NAME=c_dep1>
ENTER CASH DEPOSIT 2:
<INPUT TYPE="AMT" SIZE=8 NAME=c_dep2>
ENTER CASH DEPOSIT 3:
<INPUT TYPE="AMT" SIZE=8 NAME=c_dep3>
ENTER CASH DEPOSIT 4:
<INPUT TYPE="AMT" SIZE=8 NAME=c_dep4>
ENTER CHANGE FUND:
<INPUT TYPE="AMT" SIZE=8 NAME=chg_fund>
```

**FIG.22A**

```

ENTER CC DEPOSIT:
<INPUT TYPE="AMT" SIZE=8 NAME=cc_dep>
ENTER BATCH #:
<INPUT TYPE="INT" SIZE=3 NAME=batch_no>
ENTER CHARGE SALES:
<INPUT TYPE="AMT" SIZE=8 NAME=chrg_sales>
ENTER PAID OUTS:
<INPUT TYPE="INT" SIZE=8 NAME=paid_outs>
ENTER CARRY OUT SALES:
<INPUT TYPE="AMT" SIZE=8 NAME=co_sales>
ENTER CREDIT CARD SALES:
<INPUT TYPE="AMT" SIZE=8 NAME=cc_sales>
ENTER TAX EXEMPT SALES:
<INPUT TYPE="AMT" SIZE=8 NAME=te_sales>
<INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>

```

#### 10.b. Transaction Response

```

<HTML>
<BODY>
<FORM ACTION=TO PRINTER METHOD=POST>
JUNE 1 1995      10:30AM      DAILY REPORT</P>
TERMINAL ID:          99999999</P>
GROSS SALES          999999.99</P>
VOIDS                99      999999.99</P>
EMP DISCOUNTS      99      999999.99</P>
MANAGER DISCOUNTS  99      999999.99</P>
VIP CARD             99      999999.99</P>
COUPONS              99      999999.99</P>
MANUAL OVERRINGS     99      999999.99</P>
SALES TAX            999999.99</P>
CASH DEPOSIT 1       999999.99</P>
CASH DEPOSIT 2       999999.99</P>
CASH DEPOSIT 3       999999.99</P>
CASH DEPOSIT 4       999999.99</P>
CASH DEPOSIT 5       999999.99</P>
CHANGE FUND          999999.99</P>
CC DEPOSIT            999      999999.99</P>
CHARGE SALES          999999.99</P>
PAID OUTS             99      999999.99</P>
CARRY OUT SALES      999999.99</P>
CREDIT CARD SALES    999999.99</P>
TAX EXEMPT SALES     999999.99</P>
-----</P>
NET SALES            99999999</P>
OVER/SHORT           99999999</P>
</FORM>
</BODY>
</HTML>

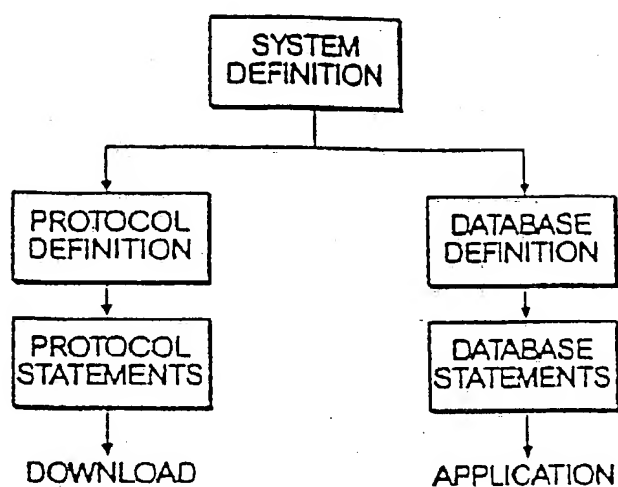
```

**FIG.22B**

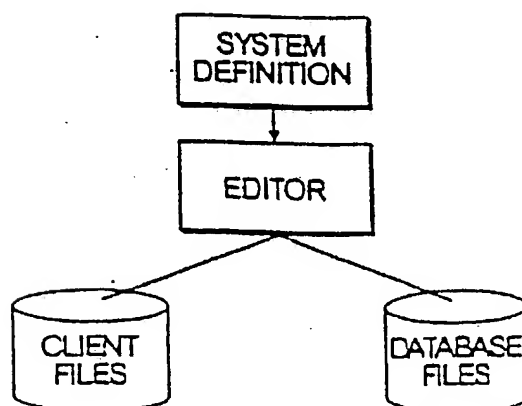
### 11.a. Transaction Request HTML+D

```
<HTML>
<BODY>
<FORM ACTION=MAIL TO: mail_to>
  ENTER MAIL ADDRESS:
  <INPUT TYPE="TEXT" SIZE=20 NAME=mail_to>
  ENTER MESSAGE:
  <INPUT TYPE="TEXT" SIZE=100>
  <INPUT TYPE="AUTOSUBMIT">
</FORM>
</BODY>
</HTML>
```

**FIG.23**



**FIG.24A**



**FIG.24B**